slightly less than the average contribution of $11.83 received from residence services, and $21.38 from business services. The price is also in the lower portion of the range of rates shown in the illustrative tariffs.

Q. Does this rate level comply with the Department's goals and pricing policies?

A. Yes. The rate is based upon the marginal cost of the link and considers both the illustrative tariffs levels of contribution as well as the contribution from similar offerings. In fact, the rate levels produce less contribution than the prices of some other cross elastic services.

Q. Does the contribution level you describe prevent the CLEC from entering the market?

A. No. The CLEC has many options for competing. The CLEC can build facilities rather than utilizing NYNEX's facilities. The CLEC will only have incentives to use NYNEX facilities when they can take advantage of NYNEX's average price to avoid building in more costly situations. When the economics favor building a facility, the CLECs have incentives to choose that alternative. The CLEC's will also provide value added ancillary offerings to their customers and receive contribution from those offerings as NYNEX does. They can package a number of offerings provided by their own facilities or provided through the resale of other carrier's services. Not only can these packages include all offerings currently offered by NYNEX, but also offerings that NYNEX is still prohibited from providing, such as interLATA toll, interstate toll and international toll. They will also receive contribution in the form of access charges from other carriers who use their network and they can recover contribution from usage charges between subscribers on their own networks. Finally, they have the opportunity to profit through innovation and more efficient operations.

Q. What are the consequences of pricing the link without sufficient contribution?

A. If links are priced without sufficient contribution, CLECs are given uneconomic incentives to enter the market, and discouraged from provisioning their own facilities if they can do so more efficiently than NYNEX. They will be given incentives to subscribe to links priced at artificially low levels and arbitrage NYNEX's retail tariff.

Q. You've described a proposed price that addresses situations in which carriers desire to purchase month to month offerings. Some may argue that there should be wholesale discounts for links. How would the Company respond?

A. There may be requests for volume and long term discounts that would warrant future consideration. If requested, the Company would make an assessment, and if feasible, could come forward with a proposal the would reflect any appropriate cost factors. The interconnection month-to-month charges described in this testimony already account for any cost savings on a statewide average basis and therefore, should not be discounted further.

I would also note that the expected behavior of CLECs may cause the development of segmented marginal costs and charges which consider the difference in contribution required from dial-tone lines in end offices like Martha's Vineyard, where the costs to provide facilities are higher, versus end offices in a more densely populated part of the state such as Boston. If the CLEC serves classes of customers in the same proportion and geographic distribution as NYNEX, the average cost and charge would be appropriate. In other cases, there may be a need to develop a weighted charge based upon serving more or less densely populated areas.

Q. Will there also be nonrecurring charges associated with the provision of links?

A. The Company believes that the charges for the link should recover not only the marginal costs but also the start-up costs associated with the provision of links. Start-up costs, including any additional costs of bill provisioning and support systems, should be recovered in nonrecurring charges. Since the new services desired by the new entrants may only be needed for a limited period, the start-up costs should be recovered through upfront charges.

If a requested offering is merely piece parts of offerings NYNEX already provides, the recurring and nonrecurring costs developed in MCS VI can be used. In some instances, there may also be a cost to disaggregate a tariff offering. These costs must be recovered as well by those requesting the disaggregation and may need to be recovered as one time charges.

Q. Please describe the mutual compensation arrangements for interchange of traffic between a CLEC and NYNEX and the appropriate pricing of the service.

A. As described by Mr. Calabro, compensation arrangements between interconnecting carriers are the arrangements in which one carrier compensates another for the use of the competing carrier's network and facilities. These arrangements presently exist for the origination and termination of toll traffic of the interexchange carriers and are called switched access. A new form of compensation is described in Mr. Calabro's testimony for local calls originating on one network and terminating in another. This new offering, which I will refer to as local switched access, should be priced using the Department's established pricing principles that I have previously described.

Q. Please describe how the Company would develop charges for local switched access.

A. The Company proposes that for simplicity, these charges use the existing access structure and rate elements, which are Local Switching, Local Transport and Carrier Common Line. The present switched access charges will apply when a customer uses the switched network to complete a toll call or a call beyond the local calling area. Local switched access will apply for the completion of local calls and will be provided as Feature Group D, which is currently available to all customers.

Q. How should local switched access be priced?

A. Like other services, local switched access prices should consider marginal costs. The marginal costs for local switched access is displayed in Attachment 3 to my testimony. Local switched access costs are $.005286 on average and can range from $.002059 to $.008574 depending upon the routing of the terminating call.

More importantly, local switched access should be priced in relation to the current local charges, or in other words by recognizing the appropriate retail and wholesale relationship or the cross elasticity of the offerings. Using the retail local usage charge as a starting point, the wholesale local price should be established by subtracting the marginal cost difference of the network components and any relevant retail overhead. The resultant average charge per terminating minute is:

| | |
|---|---|
| Average Retail Local Usage Charge | $.023071 |
| Retail/Wholesale Differential | $.006259 |
| Average Local Switched Access Charge | $.016812 |

The average charge exceeds marginal cost and provides the same level of contribution as the average local usage charge.

This charge is a statewide average charge and will need to be disaggregated by LATA to produce rates. The calculations supporting the average charge and the retail/wholesale differential are displayed in Attachment 3.

Q. If these charges are reciprocal, could these charges be established at marginal cost?

A. If a CLEC and NYNEX charge each other the same rate elements for access charges and if the traffic between networks is of equivalent volume, existing switched access or local access terminating charges will cancel each other out. However, in the switched access tariff, Feature Group D is available to all customers. Therefore, the cross elasticity of retail local charges must be considered when establishing wholesale local charges.

Q. How is this proposal in keeping with the Department's principles?

A. This proposal is in keeping with the Department's findings in D.P.U. 89-300 regarding retail pricing for toll service and wholesale pricing of switched access service as previously described. The Department has recognized the need to price services in relation to similar services to avoid economic inefficiency or tariff arbitrage. In its Order, the Department stated:

"The method used by NET to derive an appropriate retail/wholesale difference ensures that the amount by which toll and switched access services exceed their

> marginal costs is linked, so that consumers receive the same price signals about similar services with the same underlying costs. (Order p. 217)

The Department reaffirmed that linkage in its Order in D.P.U. 94-50. (p. 248-249) The retail and wholesale relationship of local charges is the same as that of retail toll and wholesale switched access charges. The proposed methodology for pricing of local access should recognize the linkage of the retail and wholesale offerings to promote economic efficiency and avoid tariff arbitrage.

Q. What are the consequences of not including contribution in the local switched access charges?

A. Unless the cross elasticity of local switched access charges and retail local charges is recognized, economically efficient charges will not be achieved and customers will be provided an uneconomic incentive to tariff shop. The Department has repeatedly established charges to promote economic efficiency and to avoid this type of incentive.

Q. Are there requests for arrangements other than local switched access for which charges are needed?

A. Yes. There are other network components for which there is demand and which NYNEX will make available to competing local exchange carriers. The services are Directory Assistance, Directory Listings, access to 911 and E911, Signaling System 7 (SS7) and services which facilitate interim number portability.

Q. How should access to these network components be priced?

A. To the extent that access arrangements are comparable to existing tariff offerings, the tariffed charges should apply. If the network component is different than the tariff offerings, new charges will be required and cost savings, if any, should be reflected in the charge. Conversely, if the new offering causes the Company to incur additional costs, charges should reflect the costs incurred to provide the network components.

Q. Please describe how directory listings and Directory Assistance Service should be priced.

A. The charges for Directory Listings Services will include a one time charge to establish the listing and an annual maintenance charge for directory listings. NYNEX will provide a white and yellow page listing to the carrier, if desired, and include normal directory delivery to the carrier's subscribers.

For Directory Assistance, the existing access per call tariff charge should apply for each Directory Assistance inquiry. NYNEX would also charge the carrier for any branding or carrier identification desired by the carrier as described in Mr. Calabro's testimony. NYNEX will also offer call completion for Directory Assistance inquiries. All of these charges will recover the costs of the services provided.

Q. How does the Company propose to recover the costs for access to 911 and E911 service?

A. NYNEX will provide 911 Service at existing tariffed charges. For E911 service, NYNEX proposes to bill new entrants a monthly prorated charge based upon NYNEX's E911 costs, as reported to the Department annually in April, and each carrier's percent share of total telephone numbers in the E911 database.

Currently NYNEX's costs for implementing E911 Service for its customers are recovered through a directory assistance charging plan. The prorated charge to CLECs for a portion of E911 costs will offset the lost directory assistance revenue resulting from the loss of customers to competing carrier networks. The charging mechanism avoids having NYNEX's remaining customers pay the total cost of providing E911 service for themselves and the competing carriers' customers.

Q. What charges will apply for access to SS7 facilities?

A. The Company is developing charges for access to SS7 interconnection in response to other customer requests. Charges for this network component will be based upon the framework established by the Department and described in this testimony. The tariffs are expected to be filed within two months. The Company proposes that the Department approve these tariffs with the proviso that the tariff is potentially subject to change resulting from an order in this proceeding.

Q. How does the Company propose to charge for interim number portability?

A. The Company will file a tariff for this offering in conjunction with the Order in this case. Consistent with other offerings, the charges for number portability would be established in accordance with the Department's framework.

UNIVERSAL SERVICE FUNDING

Q. What is universal service?

A. In its Order in D.P.U. 1731, the Department determined that one if its major public policy goals was to ensure the continued ability of the vast majority of the population in Massachusetts to obtain basic telecommunications services. This goal is referred to as universal service. From a customer's perspective, universal service is the availability of service at a reasonable price. This objective has been achieved in Massachusetts. The Department has consistently balanced its goal of achieving more economically efficient pricing with its support for universal service. In D.P.U. 69-300, target rates were established in recognition of the need to preserve universal service and then throughout the transition filings, rates were moved gradually toward target levels. The present prices have levels of contribution which are higher than they otherwise would be because the prices were established to recognize this goal.

From a carrier's perspective, the goal of universal service requires that it serve all customers in all geographic areas regardless of the cost characteristics of providing service. Moreover, it requires that the carrier price some services, primarily residence exchange service, below an economically efficient level to ensure affordable service. The carrier's ability to meet its obligation is predicated on its ability to recoup its costs through a pattern of prices that contain varied levels of contribution. NYNEX's existing rates reflect a pattern of pricing which was established with varied levels of contribution to balance universal service with other economic and public policy goals.

Q. Will the goal of universal service be jeopardized by the entrance of local exchange competition?

A. No. As long as the Department continues the pattern of pricing which recognizes the need for comparable levels of contribution from cross elastic or substitutable services, the goal of universal service is not jeopardized and there is no need for a broad Universal Service Fund.

If the Department does not maintain appropriate levels of contribution in NYNEX's offerings, a Universal Service Fund would be required to support the low revenue producing, more costly to serve customers The size of the fund and the eligible recipients could vary, and the Department would need to determine which companies would contribute to the fund and which firms would draw from the fund. A fund would be difficult to design and would only be a substitute for an appropriate level of contribution in interconnection charges. The Company believes its proposal strikes a reasonable balance and will permit the Company to fulfill its obligations without requiring an administratively complex fund.

RESALE OF NYNEX'S UNLIMITED SERVICES

Q. In its Notice opening this investigation, the Department directed parties to address the issue of the resale of NYNEX's unlimited exchange services. Could you please comment on this matter.

A. The resale of NYNEX's services is currently addressed in its tariffs. All offerings in the Exchange and Access tariffs are available for resale except for Unlimited Business exchange service, which is only available in exchanges outside of Metropolitan Boston, and Unlimited Flexpath® and Unlimited Centrex service, which are also available only in certain exchanges. Residence exchange service is generally not available for resale because by definition, its use is for a residence customer and not for business purposes. The only exception to the Residence resale restriction is for educational institutions that provide exchange services to occupants of student housing. In this limited situation, the Department allowed resale. (See Complaint of Massachusetts Institute of Technology, D.P.U. 86-13)

Q. Does the Company believe that the present restrictions are reasonable?

A. Yes. If resale of unlimited services were limited to situations where the reseller becomes the interface or billing agent for the ultimate consumer, the Company would not oppose the resale of service, including any ancillary offerings, to the reseller on behalf of a named end user. The reseller would then simply resell the entire NYNEX unlimited package.

However, this is not the resale phenomenon that some firms may contemplate for exchange services. The resale that is occurring today for offerings that are subject to resale, primarily usage, involves the aggregation of traffic of multiple end users. In traffic aggregation resale, the reseller gathers traffic using switched access and aggregates traffic at its switch. The reseller takes advantage of volume discounts by reconfiguring the delivery of traffic from multiple end users to the NYNEX switch to appear as a high volume user. If the reseller or carrier could subscribe to unlimited offerings, the use of any measured offering could be avoided.

The restriction is needed to promote economic efficiency. Economic efficiency is promoted by prices based upon costs and by price structures which encourage and enable customers to change their consumption patterns. Typically carriers have high volumes of usage and would be encouraged to select unlimited business service to avoid local usage charges. Unlike the measured structure, where customers pay for what they use, unlimited business service would allow the carrier to avoid paying for their greater than average usage. The Company has previously advocated the grandfathering of business unlimited service to avoid the uneconomic use of the service by large users. Offering the service to carriers exacerbates the problem. Certainly, the availability of the service should not be expanded at this time.

Furthermore, carriers could combine unlimited exchange service with private line offerings to effectively tariff shop. This would have the effect of undercutting switched access prices as well as retail toll charges. Using the service to avoid toll and switched access charges will only create an opportunity for tariff arbitrage and will not promote economic efficiency. Rather than create this uneconomic incentive, the unlimited business service should be limited as it is today, to non-carriers.

The reselling of residence exchange service provides similar uneconomic incentives. If unlimited services were available for resale, the same uneconomic incentives would encourage the carrier to subscribe to residence service and take advantage of even lower usage charges and dial-tone line charges than for business unlimited service. Even the resale of residence measured service provides incentives to tariff shop since the dial-tone line charges and usage charges are lower than the current business local usage charges.

Q. Is there any way to allow the first type of resale you describe to occur and avoid the aggregator's incentives?

A. The Company does not believe that it is practical to allow resale of unlimited services at this time. There are considerable difficulties associated with monitoring resale on a one-for-one basis. For example, if a carrier subscribes to three unlimited lines in a residential apartment complex, the Company would not know if the service was being used for one-to-one resale for three end users, or if the carrier were aggregating traffic from many end users. Given the large number of carriers in Massachusetts and the potential for aggregation, monitoring carrier use of unlimited service would be nearly impossible.

SUMMARY

Q. Please summarize your testimony.

A. My testimony describes a framework for pricing links and other interconnection arrangements, and shows how the pricing proposals relate to the Department's framework for the pricing of services. The Company has proposed a framework for establishing the prices of interconnection arrangements in which the price would recover the marginal cost for the offerings and promote economic efficiency. If this proposal is approved and the Department continues its pricing policies which ensure appropriate levels of contribution are recovered from services, the Company believes there is no need for a broad Universal Service Fund. I have also explained why the resale of unlimited service should continue to be restricted.

Q. Does this conclude your testimony?

A. Yes.

LINK SERVICE
MONTHLY RECURRING COST
MASSACHUSETTS

| | DESCRIPTION | COST | SOURCE |
|---|---|---|---|
| L1 | Residential Loop | $7.53 | MCS I, DKT 86-33 BOOK 1, PART 3E1, PAGE 19 |
| L2 | Business Loop | $5.37 | MCS I, DKT 86-33 BOOK 1, PART 3E1, PAGE 19 |
| L3 | Cost of SMAS Test Access | $2.31 | Attached |
| L4 | **Total Marginal cost - Residence** | $9.84 | L1 + L3 |
| L5 | **Total Marginal cost - Business** | $7.68 | L2 + L3 |

# SWITCHED VOICE GRADE ANALOG LINK SERVICE
# MASSACHUSETTS

## MONTHLY RECURRING COST

### *SMAS*

| | DESCRIPTION | PER UNIT | QTY | TOTAL | |
|---|---|---|---|---|---|
| L1. | STAGE 1 CONTROLLER - SHELF | $1,312.00 | 1/5 | $262.40 | |
| L2. | MAINT. CONN. CONTROLLER - SHELF | $257.00 | 1 | $257.00 | |
| L3. | MAINT. CONN. - SHELF | $250.00 | 10 | $2,500.00 | |
| L4. | TOTAL SHELF MATERIAL PRICE | | | $3,019.40 | L1+L2+L3 |
| L5. | HARDWIRE INSTALLATION FACTOR | | | 2.0000 | |
| L6. | TOTAL SHELF INSTALLED INVESTMENT | | | $6,038.80 | L4 x L5 |
| L7. | STAGE 1 CONTROLLER - CARD | $680.00 | 1 | $680.00 | |
| L8. | MAINT. CONN. CONTROLLER - CARD | $953.00 | 5 | $4,765.00 | |
| L9. | MAINT. CONN. - CARD | $776.00 | 10 | $7,760.00 | |
| L10. | TOTAL CARD MATERIAL PRICE | | | $13,205.00 | L7+L8+L9 |
| L11. | PLUG-IN INSTALLATION FACTOR | | | 2.0000 | |
| L12. | TOTAL CARD INSTALLED INVESTMENT | | | $26,410.00 | L10 x L11 |
| L13. | TOTAL SMAS INSTALLED INVESTMENT | | | $32,448.80 | L6 + L12 |
| L14. | CIRCUITS per ABOVE EQPT | | 250 | | |
| L15. | TOTAL SMAS INSTALLED INVESTMENT per CKT | | | $129.80 | L13 / L14 |
| L16. | CAPITAL COST FACTOR | | | 0.1960 | |
| L17. | ANNUAL CAPITAL COST | | | $25.44 | L15 x L16 |
| L18. | MAINTENANCE COST FACTOR | | | 0.0179 | |
| L19. | ANNUAL MAINTENANCE COST | | | $2.32 | L15 x L18 |
| L20. | TOTAL SMAS EQPT - ANNUAL COST per CKT | | | $27.76 | L17 + L19 |
| L21. | TOTAL SMAS EQPT - MONTHLY COST per CKT | | | $2.31 | L20 / 12 |

## REVENUE PER DIAL TONE LINE (DTL)

| LINE | DESCRIPTION | | SOURCE |
|---|---|---|---|
| 1 | RESIDENCE REVENUES | $942,779,880 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 4 |
| 2 | RESIDENCE DTLs | 30,054,724 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 3 | REVENUE PER DTL | $31.37 | L1 / L2 |

## COST PER DTL

| | | | |
|---|---|---|---|
| 4 | RESIDENCE CORE 3<br>MARGINAL COST (MC) | $194,698,409 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 5 | RESIDENCE DTLs | 30,054,724 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 6 | MC PER DTL | $13.06 | MA DPU 86-33<br>MARGINAL COST<br>BOOK 2 OF 3<br>P. 47 OF 511 |
| 7 | RESIDENCE DTL MC | $392,514,695 | L5 * L6 |
| 8 | TOTAL RESIDENCE MC | $587,213,104 | L4 + L7 |
| 9 | MC PER DTL | $19.54 | L8 / L5 |

## CONTRIBUTION PER DTL

| | | | |
|---|---|---|---|
| 10 | CONTRIBUTION PER DTL | $11.83 | L3 - L9 |

## REVENUE PER DIAL TONE LINE (DTL)

| LINE | DESCRIPTION | | SOURCE |
|---|---|---|---|
| 1 | BUSINESS REVENUES | $552,427,333 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. J P. 4 |
| 2 | BUSINESS DTLs | 13,134,211 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 3 | REVENUE PER DTL | $42.06 | L1 / L2 |

## COST PER ACCESS LINE

| | | | |
|---|---|---|---|
| 4 | BUSINESS CORE 3 MARGINAL COST (MC) | $130,088,221 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 5 | BUSINESS DTLs | 13,134,211 | MA DPU 93-125<br>P. BROWN TESTIMONY<br>ATT. I P. 79 |
| 6 | MC PER DTL | $10.78 | MA DPU 86-33<br>MARGINAL COST<br>BOOK 2 OF 3<br>P. 78 OF 511 |
| 7 | BUSINESS DTL MC | $141,586,795 | L5 * L6 |
| 8 | TOTAL BUSINESS MC | $271,675,016 | L4 + L7 |
| 9 | MC PER DTL | $20.68 | L8 / L5 |

## CONTRIBUTION PER DTL

| | | | |
|---|---|---|---|
| 10 | CONTRIBUTION PER DTL | $21.38 | L3 - L9 |

MASSACHUSETTS
RETAIL LOCAL USAGE REVENUE PER MINUTE
JUNE [illegible] DATA



| | | | CONVERSATION | | |
|---|---|---|---|---|---|
| **BUSINESS** | | MESSAGES | MINUTES | REVENUE | ARPM |
| *EASTERN LATA* | | | | | |
| MEASURED | ZONE 1 | 84,168,660 | 180,600,527 | $5,413,802.65 | 0.029977 |
| | ZONE 2 | 16,367,682 | 41,464,078 | $2,771,281.17 | 0.066836 |
| | TOTAL | 100,536,342 | 222,064,605 | $8,185,083.82 | 0.036859 |
| UNLIMITED W/I PCA | ZONE 1 | 27,047,154 | 45,532,726 | $4,402,439.00 | 0.096687 |
| PBX UNLIM W/I PCA | ZONE 1 | 7,363,383 | 16,644,578 | $815,703.00 | $0.049007 |
| CTX UNLIM W/I PCA | ZONE 1 | 2,312,988 | 5,820,202 | $174,950.00 | $0.030059 |
| *WESTERN LATA* | | | | | |
| MEASURED | | 11,164,587 | 22,349,184 | $437,587.00 | $0.019580 |
| UNLIMITED W/I PCA | | 3,398,036 | 6,394,215 | $481,709.00 | $0.075335 |
| PBX UNLIM | | 1,164,850 | 3,123,118 | $138,710.04 | $0.044414 |
| CTX UNLIM | | 195,530 | 492,014 | $14,772.00 | $0.030024 |
| TOTAL WESTERN | | 15,943,003 | 32,358,531 | $1,072,778.04 | $0.033153 |
| TOTAL EASTERN | ZONE 1 | 120,892,185 | 248,598,033 | $10,806,895 | $0.043471 |
| | ZONE 2 | 16,367,682 | 41,464,078 | $2,771,281.17 | 0.066836 |
| | | 137,259,867 | 290,062,111 | $13,578,175.82 | 0.046811 |
| *BUSINESS TOTAL* | ZONE 1&2 &WESTERN | 153,202,870 | 322,420,642 | 14,650,954 | $0.045440 |
| **RESIDENCE** | | | | | |
| *EASTERN LATA* | | | | | |
| MEASURED | ZONE 1 | 7,537,216 | 23,869,009 | $454,321.21 | $0.019034 |
| | ZONE 2 | 1,983,680 | 6,623,505 | $386,804.44 | $0.058399 |
| | TOTAL | 9,520,896 | 30,492,514 | $841,125.65 | $0.027586 |
| UNLIMITED W/I PCA | ZONE 1 | 137,877,357 | 496,471,024 | $7,703,865.00 | $0.015517 |
| OCPs W/I PCA | | | | | |
| CIRCLE CALLING | ZONE 1 | 8,526,746 | 29,856,382 | $345,314.00 | $0.011566 |
| SUBURBAN SVC | ZONE 1 | 9,183,977 | 32,752,899 | $603,468.00 | $0.018425 |
| METROPOLITAN SVC | ZONE 1 | 59,457,406 | 200,198,194 | $2,859,842.00 | $0.014285 |
| BAY STATE MET | ZONE 1 | 35,324,897 | 111,916,728 | $1,409,368.00 | $0.012593 |
| BAY STATE NON-MET | ZONE 1 | 28,854,272 | 97,427,242 | $1,338,768.00 | $0.013741 |
| TOTAL | | 141,347,298 | 472,151,425 | $6,556,760.00 | $0.013887 |
| OCPs - PREMIUM | | | | | |
| CIRCLE CALLING | ZONE 1 | 377,865 | 1,927,862 | $85,297.68 | $0.044249 |
| | ZONE 2 | 106,526 | 543,899 | $24,068.32 | $0.044249 |
| SUBURBAN | ZONE 1 | 2,306,047 | 12,278,307 | $518,182.08 | $0.042210 |
| | ZONE 2 | 650,423 | 3,482,548 | $146,153.92 | $0.042210 |
| METROPOLITAN | ZONE 1 | 17,504,083 | 74,811,888 | $3,340,158.90 | $0.044647 |
| | ZONE 2 | 4,937,044 | 21,100,789 | $942,096.10 | $0.044647 |
| BAYSTATE MET | ZONE 1 | 8,048,971 | 33,464,422 | $1,456,313.04 | $0.043531 |
| | ZONE 2 | 2,270,505 | 9,435,883 | $410,754.96 | $0.043531 |
| TOTAL | | 36,202,283 | 157,013,178 | $6,923,015.00 | $0.044092 |
| *WESTERN LATA* | | | | | |
| MEASURED | | 407,432 | 1,245,819 | $20,198.00 | $0.016213 |
| UNLIMITED | | 52,709,677 | 198,482,975 | $2,024,348.42 | $0.010199 |
| WESTERN TOTAL | | 53,117,109 | 199,728,794 | $2,044,547.42 | $0.010237 |
| EASTERN TOTAL | ZONE 1 | 315,039,636 | 1,114,961,737 | $20,114,888 | $0.018041 |
| | ZONE 2 | 9,948,178 | 41,168,404 | $1,909,867.74 | $0.046394 |
| | | 324,987,814 | 1,156,129,141 | $22,024,755.55 | $0.019050 |
| *RESIDENCE TOTAL* | ZONE 1&2 &WESTERN | 378,104,923 | 1,355,858,935 | $24,069,313 | $0.017752 |
| *RES/BUS COMBINED EASTERN* | | 462,247,681 | 1,446,190,252 | 35,602,941 | $0.024618 |
| *RES/BUS COMBINED WESTERN* | | 69,060,112 | 232,087,325 | 3,117,325 | $0.013432 |
| *RES/BUS COMBINED TOTAL* | | 531,307,793 | 1,678,277,577 | $38,720,267 | $0.023071 |

## CALCULATION OF DIFFERENTIAL BETWEEN RETAIL AND WHOLESALE LOCAL USAGE

In order to calculate the cost-based differential between retail and wholesale local usage, three items are critical: 1) The network cost associated with retail usage; 2) The network cost incurred when NYNEX terminates a local call which has been initiated by a local competitor; and 3) The contribution to common costs which is included in the retail rate. After these three items are determined, the differential is calculated by subtracting item 2 from item 1 and adding to that result item 3.

## CONTRIBUTION TO RETAIL OVERHEAD

Item 3, the contribution to common costs relevant to local usage is equal to $0.001731. This was calculated by dividing local retail overhead expenses from the COSS (Product Management, Sales, Advertising, Service Order Processing) by the total number minutes of use. This calculation is shown on Workpaper 1 of this attachment.

## NYNEX'S INCREMENTAL COST PER LOCAL MINUTE OF USE

The costs associated with local usage are as follows:

| | Per Min | Per Msg |
|---|---|---|
| Intraoffice: | $0.002580 | $0.000007 |
| Interoffice: | $0.006585 | $0.000007 |

The development of these costs is displayed on Workpaper 2.
Utilizing the average intra/inter office distribution of 61% intraoffice and 39% interoffice, and an average length of call of 3.16 minutes/message, these numbers result in an average cost of $0.004144 (The development of this average is displayed on Workpaper 3 of this attachment). However, using the same average length of call* (since this is a small portion of the cost), the actual cost range is:

| Minimum: | Maximum: | Average: |
|---|---|---|
| $0.002582 | $0.006587 | $0.004144 |

* Inclusion of the per message charge adds $0.000007/3.16, or $0.000002, to the per minute network costs

## COST OF TERMINATING A MINUTE OF USE ORIGINATED BY A LOCAL ACCESS USER

The costs associated with terminating local usage originated by a local access user are below:

| | Direct Per Min | Tandem Per Min |
|---|---|---|
| Non-Collocated: | $0.006164 | $0.008734 |
| Collocated: | $0.002059 | $0.006394 |

The development of these costs is shown on Workpaper 4 of this attachment. Based on the average switched access combination of 66% direct routing and 34% tandem, and assuming a 50/50 split between collocated and non-collocated arrangements, the average incremental cost to terminate calls originated by the customers of other local exchange carriers is $0.005286. (This calculation is shown on Workpaper 5.) However, once again, these costs can be expressed as a minimum and a maximum:

| Minimum: | Maximum: | Average: |
|---|---|---|
| $0.002059 | $0.008734 | $0.005286 |

## CALCULATION OF THE DIFFERENTIAL

The calculation of the differential, then, will vary with the definition of the incremental cost. Three possible calculations are shown below:

| | Using Min Costs: | Using Max Costs: | Using Avg Costs: |
|---|---|---|---|
| 1. NYNEX NETWORK COST | $0.002582 | $0.006587 | $0.004144 |
| 2. WHOLESALE NETWORK COST | $0.002059 | $0.008574 | $0.005286 |
| 3. RETAIL OVERHEAD | $0.001731 | $0.001731 | $0.001731 |
| DIFFERENTIAL: (1. - 2. + 3.) | $0.002254 | ($0.000256) | $0.000589 |

Although it seems to make the most sense to use the average values, this could invite debate about the average routing percentage and about the 50/50 split on collocated versus non-collocated arrangements. To avoid the debate, the Company proposes using the approach it used in DPU 89-300. This approach maximizes the differential by minimizing wholesale costs and maximizing retail costs. This results in a differential of:

| | | |
|---|---|---|
| 1. | MAXIMUM NYNEX NETWORK COST | $0.006587 |
| 2. | MINIMUM WHOLESALE NETWORK COST | $0.002059 |
| 3. | RETAIL OVERHEAD | $0.001731 |

DIFFERENTIAL: $0.006259